

L Number	Hits	Search Text	DB	Time stamp
1	171	("560/330").CCLS.	USPAT; EPO; JPO; DERWENT	2002/06/12 10:38
2	60	("560/338").CCLS.	USPAT; EPO; JPO; DERWENT	2002/06/12 10:38
3	218	("560/347").CCLS.	USPAT; EPO; JPO; DERWENT	2002/06/12 10:38
4	744459	bromine or Br	USPAT; EPO; JPO; DERWENT	2002/06/12 10:38
6	94111	iodine	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
8	411303	halogen	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
9	22303	phosgene	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
10	785655	(bromine or Br) or iodine	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
12	11077	halogen and phosgene	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
13	18	(halogen and phosgene) and ((560/330).CCLS.)	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
5	7	((560/347).CCLS.) and (bromine or Br)	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
7	5	((560/347).CCLS.) and iodine	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
11	21	((560/330).CCLS.) and ((bromine or Br) or iodine)	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
14	14	((halogen and phosgene) and ((560/330).CCLS.)) not (((560/330).CCLS.) and ((bromine or Br) or iodine))	USPAT; EPO; JPO; DERWENT	2002/06/12 10:39
15	2	4845283.bn.	USPAT; EPO; JPO; DERWENT	2002/06/12 11:57
16	3	4193932.bn.	USPAT; EPO; JPO; DERWENT	2002/06/12 11:02

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	IS&R	L1	171	("560/330").CCLS.	USPAT; EPO; JPO; DERVENT	2002/06/12 10:38		
2	IS&R	L2	60	("560/338").CCLS.	USPAT; EPO; JPO; DERVENT	2002/06/12 10:38		
3	IS&R	L3	218	("560/347").CCLS.	USPAT; EPO; JPO; DERVENT	2002/06/12 10:38		
4	BRS	L4	74445 9	bromine or Br	USPAT; EPO; JPO; DERVENT	2002/06/12 10:38		
5	BRS	L6	94111	iodine	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		
6	BRS	L8	41130 3	halogen	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		
7	BRS	L9	22303	phosgene	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		
8	BRS	L10	78565 5	(bromine or Br) or iodine	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		
9	BRS	L12	11077	halogen and phosgene	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		
10	BRS	L13	18	(halogen and phosgene) and (("560/330").CCLS.)	USPAT; EPO; JPO; DERVENT	2002/06/12 10:39		

	Errors
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
11	BRS	L5	7	( ("560/347") .CCLS.) and (bromine or Br)	USPAT ; EPO; JPO; DERWE NT	2002/06/12 10:39		
12	BRS	L7	5	( ("560/347") .CCLS.) and iodine	USPAT ; EPO; JPO; DERWE NT	2002/06/12 10:39		
13	BRS	L11	21	( ("560/330") .CCLS.) and ( (bromine or Br) or iodine)	USPAT ; EPO; JPO; DERWE NT	2002/06/12 10:39		
14	BRS	L14	14	((halogen and phosgene) and (( "560/330" ) .CCLS.)) not (((("560/330") .CCLS.) and ((bromine or Br) or iodine))	USPAT ; EPO; JPO; DERWE NT	2002/06/12 10:39		
15	BRS	L15	2	4845283.pn.	USPAT ; EPO; JPO; DERWE NT	2002/06/12 11:57		
16	BRS	L16	3	4193932.pn.	USPAT ; EPO; JPO; DERWE NT	2002/06/12 11:02		

	<b>Err ors</b>
11	0
12	0
13	0
14	0
15	0
16	0

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssspta1623paz

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web  
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates  
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency  
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
NEWS 6 Mar 08 Gene Names now available in BIOSIS  
NEWS 7 Mar 22 TOXLIT no longer available  
NEWS 8 Mar 22 TRCTHERMO no longer available  
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAplus and USPATFULL  
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY  
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.  
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 14 Apr 09 ZDB will be removed from STN  
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available  
NEWS 19 Jun 03 New e-mail delivery for search results now available  
NEWS 20 Jun 10 MEDLINE Reload  
NEWS 21 Jun 10 PCTFULL has been reloaded  
  
NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic:

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002

=> file reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY 0.21	TOTAL SESSION 0.21
-----------------------------	--------------------------

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 10 JUN 2002 HIGHEST RN 428438-29-3  
DICTIONARY FILE UPDATES: 10 JUN 2002 HIGHEST RN 428438-29-3

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e phosgene/cn

E1 1 PHOSGARD XC 2000L/CN  
E2 1 PHOSGEN/CN  
E3 1 --> PHOSGENE/CN  
E4 1 PHOSGENE (2,5-DICHLOROPHENYL) HYDRAZONE/CN  
E5 1 PHOSGENE DIMER/CN  
E6 1 PHOSGENE DIPHENYL ACETAL/CN  
E7 1 PHOSGENE, AZINE/CN  
E8 1 PHOSGENE, AZINE WITH 1-NAPHTHYL KETONE/CN  
E9 1 PHOSGENE, AZINE WITH 1-NAPHTHYL PHENYL KETONE/CN  
E10 1 PHOSGENE, AZINE WITH BENZOYL CHLORIDE/CN  
E11 1 PHOSGENE, AZINE WITH P-BROMOBENZOYL CHLORIDE/CN  
E12 1 PHOSGENE, AZINE WITH P-CHLOROBENZOYL CHLORIDE/CN

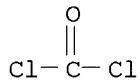
=> e3

## L1 1 PHOSGENE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
RN 75-44-5 REGISTRY  
CN Carbonic dichloride (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN **Phosgene (8CI)**  
OTHER NAMES:  
CN Carbon dichloride oxide

CN Carbon oxychloride  
 CN Carbonyl chloride  
 CN Carbonyl dichloride  
 CN CG  
 CN Chloroformyl chloride  
 CN Dichloroformaldehyde  
 CN Phosgen  
 FS 3D CONCORD  
 MF C Cl<sub>2</sub> O  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
 BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
 HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
 PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT,  
 USPAT2, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5225 REFERENCES IN FILE CA (1967 TO DATE)  
 204 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 5229 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> e bromine/cn

E1	1	BROMINDIGO R/CN
E2	1	BROMINDIONE/CN
E3	1	--> BROMINE/CN
E4	1	BROMINE (79,81BR2)/CN
E5	1	BROMINE (79BR81BR)/CN
E6	1	BROMINE (81BR2)/CN
E7	1	BROMINE (81BR81BR)/CN
E8	1	BROMINE (BR2-)/CN
E9	1	BROMINE (BR3)/CN
E10	1	BROMINE (BR4)/CN
E11	1	BROMINE 0-40.0, RUBIDIUM 60.0-100 (ATOMIC)/CN
E12	1	BROMINE 0-7.50, CESIUM 92.5-100 (ATOMIC)/CN

=> e3

L2	1	BROMINE/CN
----	---	------------

=> 12

L3	1	BROMINE/CN
----	---	------------

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
RN 7726-95-6 REGISTRY  
CN **Bromine (8CI, 9CI)** (CA INDEX NAME)  
OTHER NAMES:  
CN Bromine element  
CN Bromine molecule (Br<sub>2</sub>)  
CN Diatomic bromine  
CN Dibromine  
FS 3D CONCORD  
DR 23724-81-4  
MF Br<sub>2</sub>  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, TOXCENTER, TULSA, UOLIDAT, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Br- Br

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

21604 REFERENCES IN FILE CA (1967 TO DATE)  
734 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
21629 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> e iodine/cn  
E1 1 IODINATED POPPYSEED OIL/CN  
E2 1 IODINATED VEGETABLE OIL/CN  
E3 1 --> IODINE/CN  
E4 1 IODINE (127I2)/CN  
E5 1 IODINE (129I2)/CN  
E6 1 IODINE (I1+)/CN  
E7 1 IODINE (I129I)/CN  
E8 1 IODINE (I2-)/CN  
E9 1 IODINE (I21+)/CN  
E10 1 IODINE (I22+)/CN  
E11 1 IODINE (TRISULFATE) ((I2)2(S3O10))/CN  
E12 1 IODINE 1950U/CN

=> e3  
L4 1 IODINE/CN

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
RN 7553-56-2 REGISTRY  
CN **Iodine (8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN Actomar  
CN Diatomic iodine  
CN Diiodine  
CN Eranol  
CN Iodel FD  
CN Iodine (127I2)  
CN Iodine colloidal  
CN Iodine crystals  
CN Iodine molecule (I2)  
CN Iodine sublimed  
CN Iosan Superdip  
CN Jodosan  
CN Molecular iodine  
FS 3D CONCORD

DR 8012-81-5, 8012-85-9, 8031-47-8, 24503-90-0

MF I2

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PHAR, PIRA, PROMT, RTECS\*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

I-I

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

36914 REFERENCES IN FILE CA (1967 TO DATE)

2358 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

36944 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

21.88

22.09

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching

databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Jun 2002 VOL 136 ISS 24  
FILE LAST UPDATED: 10 Jun 2002 (20020610/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> 11  
L5 5229 L1

=> 12  
L6 21643 L2

=> 14  
L7 36942 L4

=> 16 or 17  
L8 53283 L6 OR L7

=> 15 and 18  
L9 72 L5 AND L8

=> isocyanate  
L10 53030 ISOCYANATE  
18388 ISOCYANATES  
60170 ISOCYANATE  
(ISOCYANATE OR ISOCYANATES)

=> 19 and 110  
L11 8 L9 AND L10

=> d 111

L11 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:586877 CAPLUS  
DN 131:261604  
TI Accidental release prevention  
AU Charrington, Peter R.  
CS Environmental Resources Management, Exton, PA, 19341, USA  
SO Ceramic Transactions (1998), 87(Environmental Issues and Waste Management Technologies in the Ceramic and Nuclear Industries III), 89-99  
CODEN: CETREW; ISSN: 1042-1122  
PB American Ceramic Society  
DT Journal  
LA English

=> d 111 1-8 ti

L11 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Accidental release prevention

L11 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI The Use of Benchmark Dose Methodology with Acute Inhalation Lethality Data

L11 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Management & design of process exhaust systems in an I/C manufacturing environment for emission minimization

L11 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI French limiting values for occupational exposure to chemicals

L11 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Amide derivatives from haloaminotriazines and acid halides

L11 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Air contaminants

L11 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative

L11 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS  
TI Air contaminants

=> 18 and 110  
L12 102 L8 AND L10

=> 18(1)110  
L13 15 L8(L)L10

=> color  
339480 COLOR  
35414 COLORS  
L14 358596 COLOR  
(COLOR OR COLORS)

=> 113 and 114  
L15 0 L13 AND L14

=> d 113 1-15 ti

L13 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Stereoselective synthesis of 1,3,4-trisubstituted tetrahydro-.beta.-carbolines from indoles based on selective transformations

L13 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Reaction of AgOCN with NO, NO<sub>2</sub>, ClNO<sub>2</sub>, ClNO, and BrNO: Evidence of the Formation of OCN-NO<sub>2</sub> and OCN-NO

L13 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI 3-Bromopropanoyl isocyanate as an acyclic source of the succinimidyl radical

L13 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Preparing polyoxazolidones with organoantimony iodide catalysts

L13 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Menthane diisocyanate by addition of isocyanic acid to terpinaly monoisocyanates

L13 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Determination of rotation and centrifugal distortion constants using quadrupole hyperfine structure: the microwave spectrum of iodine isocyanate, INCO

L13 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Isocyanates and/or derivatives

L13 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Syntheses of methyl .alpha.- and .beta.-DL-tetronitrosides (or kijanosides)

L13 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Isocyanate composition

L13 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Tetrahydronaphthylurea compounds

L13 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Iodine isocyanate

L13 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Iodoisocyanate addition to unsaturated fatty acids and synthesis of their 2-oxazolidones

L13 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Stereochemistry of aziridine reactions. I. Synthesis of 1-phenyl-7-azabicyclo[4.1.0]heptane and its reactions with trichloroacetic acid and with hydrogen chloride

L13 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Aromatic imidoisocyanate

L13 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2002 ACS  
TI Isocyanate-blocked, mercaptan-functional, organic polysulfides

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 09:09:40 ON 12 JUN 2002

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssspta1623paz

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 09:44:20 ON 12 JUN 2002  
FILE 'CAPLUS' ENTERED AT 09:44:20 ON 12 JUN 2002  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	12.71	34.80

=> save temp all ltisocyanate/l  
L# LIST L1-L15 HAS BEEN SAVED AS 'LTISOCYANATE/L'

=> d his

(FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002)

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002  
E PHOSGENE/CN

L1	1 E3
	E BROMINE/CN
L2	1 E3
L3	1 L2
	E IODINE/CN
L4	1 E3

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

L5	5229 L1
L6	21643 L2
L7	36942 L4
L8	53283 L6 OR L7
L9	72 L5 AND L8
L10	60170 ISOCYANATE
L11	8 L9 AND L10
L12	102 L8 AND L10
L13	15 L8(L) L10
L14	358596 COLOR
L15	0 L13 AND L14

SAVE TEMP ALL LTISOCYANATE/L

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.50	35.59

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 09:45:15 ON 12 JUN 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 09:56:24 ON 12 JUN 2002  
FILE 'CAPLUS' ENTERED AT 09:56:24 ON 12 JUN 2002

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

10

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.50	35.59

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.50	35.59

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:56:42 ON 12 JUN 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 10:45:37 ON 12 JUN 2002  
FILE 'CAPLUS' ENTERED AT 10:45:37 ON 12 JUN 2002  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.90	35.99

=> d his

(FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002)

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002

E PHOSGENE/CN

L1	1 E3
	E BROMINE/CN
L2	1 E3
L3	1 L2
	E IODINE/CN
L4	1 E3

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

L5	5229 L1
L6	21643 L2
L7	36942 L4
L8	53283 L6 OR L7
L9	72 L5 AND L8
L10	60170 ISOCYANATE
L11	8 L9 AND L10
L12	102 L8 AND L10
L13	15 L8(L) L10
L14	358596 COLOR
L15	0 L13 AND L14
	SAVE TEMP ALL LTISOCYANATE/L

=> file reg  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
13.90	35.99

FILE 'REGISTRY' ENTERED AT 10:45:52 ON 12 JUN 2002  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 10 JUN 2002 HIGHEST RN 428438-29-3  
 DICTIONARY FILE UPDATES: 10 JUN 2002 HIGHEST RN 428438-29-3

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
 for more information. See STNote 27, Searching Properties in the CAS  
 Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e diphenylmethanediamine/cn  
 E1 1 DIPHENYLMETHANE BIS(2-MALEIMIDO-*O,O'*-DIALYL BISPHENOL A  
 COPOLYM ER/CN  
 E2 1 DIPHENYLMETHANE BIS(STEARYLUREA/CN  
 E3 0 --> DIPHENYLMETHANE DIAMINE/CN  
 E4 1 DIPHENYLMETHANE DI CARBOXYLIC ACID/CN  
 E5 1 DIPHENYLMETHANE DIETHYLENEUREA/CN  
 E6 1 DIPHENYLMETHANE DIISOCYANATE, POLYMER WITH ETHYLENE AND  
 PROPY LENE OXIDES AND WITH TOLYLENE DIISOCYANATE/CN  
 E7 1 DIPHENYLMETHANE DIISOCYANATE-FORMALDEHYDE-MELAMINE-UREA  
 COPOL YMER/CN  
 E8 1 DIPHENYLMETHANE DIISOCYANATE-FORMALDEHYDE-TOLYLENE  
 DIISOCYANA TE UREA COPOLYMER/CN  
 E9 1 DIPHENYLMETHANE DIISOCYANATE-GLYCIDOL-POLYFURIT COPOLYMER/CN  
 E10 1 DIPHENYLMETHANE DIISOCYANATE-HEXANETRIOL-PROPYLENE OXIDE  
 COPO LYMER/CN  
 E11 1 DIPHENYLMETHANE DIISOCYANATE-POLY(VINYL ALCOHOL) POLYMER/CN  
 E12 1 DIPHENYLMETHANE DIISOCYANATE-POLYPROPYLENE GLYCOL  
 TRIGLYCEROL ETHER-TDI POLYMER/CN

=> e diaminophenylmethane/cn  
 E1 1 DIAMINOPHENOL/CN  
 E2 1 DIAMINOPHENYL BENZIMIDAZOLE-DIMETHYL BENZIDINE-4-HYDROXYBENZOIC  
 ACID-6-HYDROXY-2-NAPHTHOIC  
 ACID-ISOSORBIDE-P-PHENYLENEDIAMINE-TEREPHTHALIC ACID COPOLYMER/CN  
 E3 1 --> DIAMINOPHENYL METHANE/CN

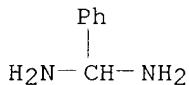
E4 1 DIAMINOPHENYLMETHANE-EPON 828-NADIC METHYL ANHYDRIDE  
 COPOLYM ER/CN  
 E5 1 DIAMINOPHENYLPHOSPHINE OXIDE/CN  
 E6 1 DIAMINOPIMELATE DAP DECARBOXYLASE SEQUENCE HOMOLOG  
 (SINORHIZ OBIUM MELILOTI GENE LYSA/SMC00723) /CN  
 E7 1 DIAMINOPIMELATE DECARBOXYLASE/CN  
 E8 2 DIAMINOPIMELATE DECARBOXYLASE (AGROBACTERIUM TUMEFACIENS  
 STR AIN C58 GENE LYSA) /CN  
 E9 1 DIAMINOPIMELATE DECARBOXYLASE (AQUIFEX AEOLICUS GENE  
 LYSA) /C N  
 E10 1 DIAMINOPIMELATE DECARBOXYLASE (BACILLUS METHANOLICUS  
 STRAIN MGA3 CLONE PDM5 GENE LYSA) (E.C. 4.1.1.20) /CN  
 E11 1 DIAMINOPIMELATE DECARBOXYLASE (BRUCELLA MELITENSIS STRAIN  
 16 M GENE BMEI0084) /CN  
 E12 1 DIAMINOPIMELATE DECARBOXYLASE (BUCHNERA STRAIN APS GENE  
 LYSA ) /CN

=> e3

L16 1 DIAMINOPHENYLMETHANE/CN

=> d 116

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
 RN 4463-43-8 REGISTRY  
 CN Methanediamine, 1-phenyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Toluene-.alpha.,.alpha.-diamine (8CI)  
 OTHER NAMES:  
 CN Benzyldenediamine  
 CN **Diaminophenylmethane**  
 FS 3D CONCORD  
 MF C7 H10 N2  
 CI COM  
 LC STN Files: CA, CAPLUS, CIN, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

17 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 17 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> logoff hold  
 COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
---------------------	------------------

FULL ESTIMATED COST 7.10 43.09

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 10:48:04 ON 12 JUN 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 10:50:46 ON 12 JUN 2002  
FILE 'REGISTRY' ENTERED AT 10:50:46 ON 12 JUN 2002  
COPYRIGHT (C) 2002 American Chemical Society (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.10	43.09

=>

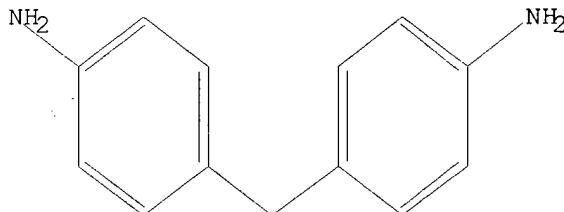
Uploading 10018636 diphenyl methane diamine.str

L17 STRUCTURE UPLOADED

=> d 117

L17 HAS NO ANSWERS

L17 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 117 exact full

FULL SEARCH INITIATED 10:51:20 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 235 TO ITERATE

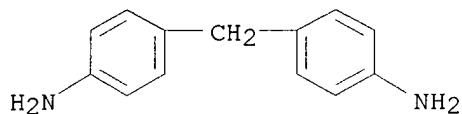
100.0% PROCESSED 235 ITERATIONS 11 ANSWERS  
SEARCH TIME: 00.00.01

L18 11 SEA EXA FUL L17

=> d scan

L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-methylenebis- (9CI)  
MF C13 H14 N2

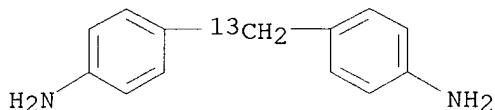
CI COM



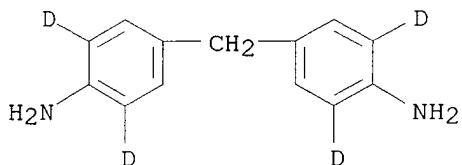
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):18

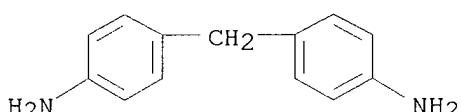
L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-(methylene-13C)bis- (9CI)  
MF C13 H14 N2  
CI COM



L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzen-2,6-d2-amine, 4,4'-methylenebis- (9CI)  
MF C13 H10 D4 N2

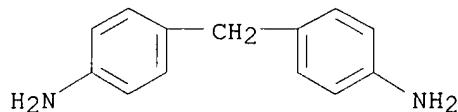


L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-methylenebis[ar,ar-dichloro- (9CI)  
MF C13 H10 Cl4 N2  
CI IDS, COM



4 ( D1-Cl )

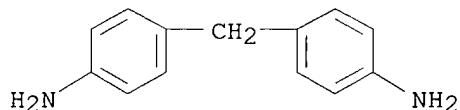
L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-methylenebis[ar-chloro- (9CI)  
MF C13 H12 Cl2 N2  
CI IDS, COM



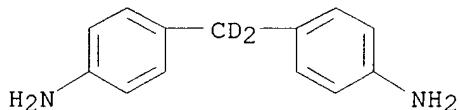
2 ( D1-C1 )

L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-methylenebis-, homopolymer (9CI)  
MF (C13 H14 N2)x  
CI PMS, COM

CM 1

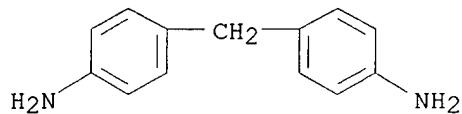


L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-(methylene-d2)bis- (9CI)  
MF C13 H12 D2 N2

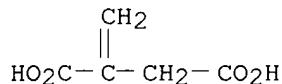


L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Butanoic acid, 4-[(4-[(4-aminophenyl)methyl]phenyl]amino)methylene-4-oxo- (9CI)  
MF C18 H18 N2 O3  
CI IDS

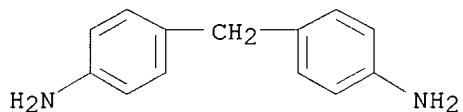
CM 1



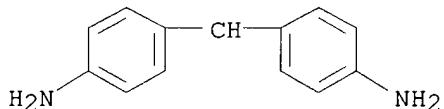
CM 2



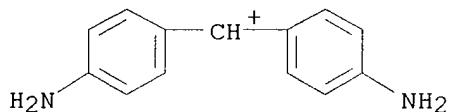
L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Benzenamine, 4,4'-methylenebis-, labeled with deuterium (9CI)  
MF C13 H10 D4 N2



L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Methyl, bis(4-aminophenyl)- (9CI)  
MF C13 H13 N2



L18 11 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Methylium, bis(p-aminophenyl)- (8CI)  
MF C13 H13 N2



ALL ANSWERS HAVE BEEN SCANNED

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE TOTAL  
ENTRY SESSION

FULL ESTIMATED COST

54.86

90.85

FILE 'CAPLUS' ENTERED AT 10:51:59 ON 12 JUN 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Jun 2002 VOL 136 ISS 24  
FILE LAST UPDATED: 10 Jun 2002 (20020610/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> 118  
L19 3948 L18

=> d his

(FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002)

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002

E PHOSGENE/CN  
L1 1 E3  
E BROMINE/CN  
L2 1 E3  
L3 1 L2  
E IODINE/CN  
L4 1 E3

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

L5 5229 L1  
L6 21643 L2  
L7 36942 L4  
L8 53283 L6 OR L7  
L9 72 L5 AND L8  
L10 60170 ISOCYANATE  
L11 8 L9 AND L10  
L12 102 L8 AND L10  
L13 15 L8(L)L10  
L14 358596 COLOR  
L15 0 L13 AND L14  
SAVE TEMP ALL LTISOCYANATE/L

FILE 'REGISTRY' ENTERED AT 10:45:52 ON 12 JUN 2002  
E DIPHENYLMETHANEDIAMINE/CN  
E DIAMINOPHENYLMETHANE/CN  
L16 1 E3  
L17 STRUCTURE uploaded  
L18 11 SEARCH L17 EXACT FULL

FILE 'CAPLUS' ENTERED AT 10:51:59 ON 12 JUN 2002  
L19 3948 L18

=> 119 and 15  
L20 45 L19 AND L5

=> 110 and 120  
L21 31 L10 AND L20

=> d 121 21-31 ti

L21 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI **Isocyanate** compositions

L21 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI N-Aryltetramethylguanidines, living catalysts for polyurethane foams

L21 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Heats of the phosgenation of aniline, 2,4-tolylenediamine, and  
4,4'-diphenylmethanediamine

L21 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Polyhalogenated polyisocyanates

L21 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI 4,4'-Methylenebis(cyclohexylisocyanate)

L21 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI N-Trimethylsilyl derivatives of some industrial diamines and their  
phosgenation

L21 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Continuous production of organic **isocyanates**

L21 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Organic polyisocyanate components

L21 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Organic **isocyanates**

L21 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI **Isocyanates**

L21 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Continuous manufacture of organic **isocyanates**

=> save temp 121 isocyanhits/a  
ANSWER SET L21 HAS BEEN SAVED AS 'ISOCYANHITS/A'

=> d 121 21,23,27,29,30,31 ti fbib abs

L21 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI **Isocyanate** compositions  
AN 1979:55488 CAPLUS  
DN 90:55488  
TI **Isocyanate** compositions  
IN Kozlowski, Kazimierz; Szczepkowski, Leonard; Papinski, Jozef; Hernacki, Stanislaw; Szulc, Ewa; Jaglowska, Jadwiga  
PA Akademia Techniczno-Rolnicza, Bydgoszcz, Pol.  
SO Pol., 2 pp.  
CODEN: POXXA7  
DT Patent  
LA Polish  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	-----	-----	-----	-----	-----	
PI	PL 87064	P	19760630	PL 1974-168589	19740204	
AB	Liq. <b>isocyanate</b> compns. were prep'd. by phosgenation of mixts. of 4,4'-diaminodiphenyl sulfone (I) [80-08-0] or its hydrochloride (1-100 wt.%) with diaminodiphenylmethane [101-77-9] or polymethylenepolyphenylenepolyamine (II) or their hydrochlorides in org. solvent, and removal of COCl <sub>2</sub> by desorption and removal of the solvent by distn. Thus, to a reactor contg. o-C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub> was added simultaneously					

COCl<sub>2</sub> and a I-II mixt. (30:70, resp.). The temp. in the reactor was 90.degree. and the temp. of the I-II mixt. was 50.degree.. Upon completion of the addn. of the mixt. the contents of the reactor were kept at 165.degree. for 2.5 h while addnl. COCl<sub>2</sub> was added. Desorption of COCl<sub>2</sub> by passing a stream of N and distn. of o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub> under diminished pressure gave a compn. [68880-54-6] of NCO group content 30.1%, Cl content 0.31% and viscosity 520 cP (at 25.degree.).

L21 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Heats of the phosgenation of aniline, 2,4-tolylendiamine, and 4,4'-diphenylmethanediamine  
AN 1976:16584 CAPLUS  
DN 84:16584  
TI Heats of the phosgenation of aniline, 2,4-tolylendiamine, and 4,4'-diphenylmethanediamine  
AU Konstantinov, I. I.; Selivanov, V. D.; Melent'eva, T. I.  
CS USSR  
SO Zh. Prikl. Khim. (Leningrad) (1975), 48(9), 2099-100  
CODEN: ZPKHAB  
DT Journal  
LA Russian  
AB **Isocyanate** formation from the title amines and COCl<sub>2</sub> is exothermic; the heats of reaction are calcd.

L21 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Continuous production of organic **isocyanates**  
AN 1974:570204 CAPLUS  
DN 81:170204  
TI Continuous production of organic **isocyanates**  
IN Artem'ev, A. A.; Strepikheev, Yu. A.; Shmidt, Ya. A.; Babkin, B. M.  
PA State Scientific Research Institute of the Nitrogen Industry  
SO Ger., 6 pp.  
CODEN: GWXXAW  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1768439	A	19711118	DE 1967-1768439	19680514
	DE 1768439	B2	19740425		
	DE 1768439	C3	19750102		

AB Carbamyl chloride formation and polymn. in the title process are prevented

by adding a 2.5-5.5 fold excess of phosgene [75-44-5] heated above its crit. temp. (i.e. to 185-235.deg.) to a soln. or suspension of amine at 165-225.deg., followed by reaction at 180-250.deg./20-150 atm. Thus, a soln. of 205 g hexamethylenediamine [124-09-4] in 2000 ml PhCl is heated to 216-19.deg. and passed over 1 hr into a pipe reactor heated to 233-5.deg./60-2 atm together with 1680 g COCl<sub>2</sub> preheated to 220-4.deg. to give 89% hexamethylene diisocyanate [822-06-0].

L21 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS

TI **Organic isocyanates**  
AN 1973:442141 CAPLUS

DN 79:42141

TI **Organic isocyanates**

IN Gee, Herbert Leonard

PA Quimco G.m.b.H.

SO Ger. Offen., 20 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2252068	A1	19730510	DE 1972-2252068	19721024
	BE 790461	A1	19730215	GB 1971-49458	19711025
				BE 1972-123405	19721023
				GB 1971-49458	19711025
	FR 2158909	A5	19730615	FR 1972-37432	19721023
				GB 1971-49458	19711025
	ES 407916	A1	19751101	ES 1972-407916	19721024
				GB 1971-49458	19711025
	JP 48049721	A2	19730713	JP 1972-107032	19721025
				GB 1971-49458	19711025

AB **Isocyanates** were prep'd. by heating an amine with COCl<sub>2</sub> at 148-50.degree./3 atm in the presence of an excess of **isocyanate**. Thus, 1 kg PhNH<sub>2</sub> was added to 10 kg PhNCO contg. COCl<sub>2</sub> and HCl at 80.degree./3 atm; 8 kg recovered HCl-contg. COCl<sub>2</sub> soln. was added and the mixt. was heated to 148-50.degree. to give, after 1 hr, 96% PhNCO.

L21 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS

TI **Isocyanates**

AN 1973:431672 CAPLUS

DN 79:31672

TI **Isocyanates**

IN Edmondson, John Neville; Hulse, Rae; Kerrigan, Vincent

PA Imperial Chemical Industries Ltd.

SO Ger. Offen., 17 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
--	------------	------	------	-----------------	------

PI	DE 2249459	A1	19730419	DE 1972-2249459	19721009
				GB 1971-47795	19711014
IT	967968	A	19740311	IT 1972-29815	19720928
				GB 1971-47795	19711014
NL	7213291	A	19730417	NL 1972-13291	19721002
				GB 1971-47795	19711014
BE	789809	A1	19730406	BE 1972-122871	19721006
				GB 1971-47795	19711014
FR	2157485	A5	19730601	FR 1972-36382	19721013
				GB 1971-47795	19711014
JP	48048419	A2	19730709	JP 1972-103161	19721014
				GB 1971-47795	19711014

AB **Isocyanates** were prep'd. by treating a mixt. of (2) amines with COCl<sub>2</sub>. Thus, a mixt. of cyclohexylamine and a polyphenylamine, prep'd. by reacting HCHO and PhNH<sub>2</sub>, was treated with COCl<sub>2</sub> to give cyclohexyl **isocyanate** and polyphenyl polyisocyanate; a mixt. of n-C<sub>8</sub>H<sub>17</sub>NH<sub>2</sub> and n-C<sub>18</sub>H<sub>37</sub>NH<sub>2</sub> gave n-C<sub>8</sub>H<sub>17</sub>NCO and n-C<sub>18</sub>H<sub>37</sub>NCO.

L21 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Continuous manufacture of organic **isocyanates**  
 AN 1973:3936 CAPLUS  
 DN 78:3936  
 TI Continuous manufacture of organic **isocyanates**  
 IN Horn, Peter; Schuster, Ludwig  
 PA Badische Anilin- und Soda-Fabrik A.-G.  
 SO Ger. Offen., 14 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2112181	A	19721005	DE 1971-2112181	19710313
	FR 2129554	A5	19721027	FR 1972-8236	19720309
				DE 1971-2112181	19710313
	BE 780513	A1	19720911	BE 1972-114942	19720310
				DE 1971-2112181	19710313

AB MeC<sub>6</sub>H<sub>3</sub>(NCO)2-2,4 (I), (p-OCNC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>CH<sub>2</sub>, and mixts. of 4,4'-, 4,2'-, and 2,2'-diisocyanatodiphenylmethanes with polyphenylpolymethylene polyisocyanates were continuously prep'd. by reaction of liq. polyamines with COCl<sub>2</sub> gas at 115 in packed columns with recycling of unreacted COCl<sub>2</sub>

and parts of the liq. reaction mixt. Thus, COCl<sub>2</sub> 37,000, N 6000, and 8% MeC<sub>6</sub>H<sub>3</sub>(NH<sub>2</sub>)<sub>2</sub>-2,4 in C<sub>6</sub>H<sub>5</sub>Cl 1040 ml/hr were passed at 115 through a ball-filled column and the product sepd. into a gaseous and a liq. product flow; 185,000 ml of the latter and 5000 ml of N-contg. COCl<sub>2</sub> were recycled. The separator yielded 1040 ml of reaction product/hr, which, on removal of C<sub>6</sub>H<sub>5</sub>Cl by distn., gave 92% I.

=> d 121 10-20 ti

L21 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative

L21 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Methylene-bridged polyarylamine and its preparation

L21 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Alkenylated diphenyl diisocyanates for use in preparing polyurethane-urea systems

L21 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Bis(trichloromethyl) carbonate as an alternative reagent for phosgene

L21 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Residue-free phosgenation of aromatic amines

L21 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Continuous production of organic mono- and/or polyisocyanates

L21 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Two-step continuous manufacture of aromatic **isocyanates**

L21 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Continuous preparation of organic **isocyanates**

L21 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Organic **isocyanates**

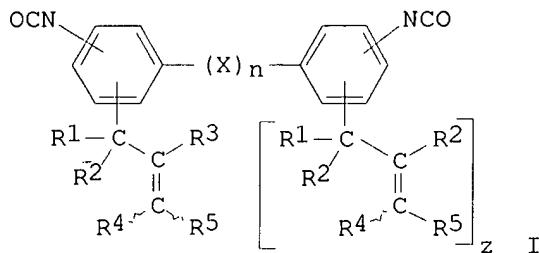
L21 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Isocyanuric acid esters

L21 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Organic **isocyanates** by phosgenation

=> d l21 12,14,15-18,20 ti fbib abs

L21 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2002 ACS  
TI Alkenylated diphenyl diisocyanates for use in preparing polyurethane-urea systems  
AN 1989:615069 CAPLUS  
DN 111:215069  
TI Alkenylated diphenyl diisocyanates for use in preparing polyurethane-urea systems  
IN Burgoyne, William Franklin, Jr.; Dixon, Dale David  
PA Air Products and Chemicals, Inc., USA  
SO Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 311901	A2	19890419	EP 1988-116545	19881006
	EP 311901	A3	19900829		
	R: DE, FR, GB				
				US 1987-108408	19871014
	US 4845283	A	19890704	US 1987-108408	19871014
	JP 01139618	A2	19890601	JP 1988-259266	19881014
				US 1987-108408	19871014
OS	MARPAT 111:215069				
GI					



AB The title compds. I (R1-5 = H, C1-3 alkyl, Ph, halo, alkoxy; R2R4, R2R5 = C2-5 alkylene; X = CH<sub>2</sub>, alkylene, O, S, etc.; n = 0-1; z = 0-1), having .gtoreq.1 alkenyl group ortho to an **isocyanate** group, are prep'd. for use in polyurethane-urea systems contg. pendant crosslinkable unsatd. groups. Heating 1.64 mol 4,4'-methylenedianiline with 1.23 mol dicyclopentadiene in 2.78 mol pentane in the presence of 20 g zeolite (13:87 Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>) at 205.degree. for 22 h gave 2-(2-cyclopenten-1-yl)-4,4'-methylenedianiline which was phosgenated in dioxane at 57.degree. and heated at 85.degree. to give 2-(2-cyclopenten-1-yl)-4,4'-diisocyanatodiphenylmethane (II). II and HO(CH<sub>2</sub>CH<sub>2</sub>O)<sub>3</sub>H were copolymd. to give a polyurethane which was cured in the presence of Co naphthenate.

L21 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Residue-free phosgenation of aromatic amines  
 AN 1986:207865 CAPLUS  
 DN 104:207865  
 TI Residue-free phosgenation of aromatic amines  
 IN Pohl, Siegmund; Guettes, Bernd; Romanowski, Helmut; Grossmann, Hans Juergen; Scharr, Volker; Hendel, Harald; Hendreich, Regina; Gassan, Michael; Marquardt, Renate; et al.  
 PA VEB Synthesewerk Schwarzeide, Ger. Dem. Rep.  
 SO Ger. (East), 3 pp.  
 CODEN: GEXXA8  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DD 227698	A1	19850925	DD 1984-268213	19841010
	DD 227698	B1	19870819		

AB In the title process, a mixt. of arom. amines (viscosity <450 mPa-s) contg. <4.0% biquinoline or derivs. and <40 ppm Cl [primarily as NaCl or FeCl<sub>3</sub> complexes of 4,4'-methylenedianiline (I)] is phosgenated. Thus, a I-polyamine mixt. (viscosity 315 mPa-s at 70.degree.) contg. 2.2% biquinoline and 16 ppm Cl was phosgenated in PhCl to give an MDI-polyisocyanate mixt. contg. 0.45% hydrolyzable Cl and 0.06% acidity (viscosity 180 mPa-s at 25.degree.) and leaving essentially no residue on distn.

L21 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Continuous production of organic mono- and/or polyisocyanates  
 AN 1986:19945 CAPLUS  
 DN 104:19945  
 TI Continuous production of organic mono- and/or polyisocyanates

IN Ohlinger, Rainer; Schnez, Harald; Pfannenstiel, Ludwig; Blumenberg, Bernd;

RAABE, Hans Joachim

PA BASF A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 15 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3403204	A1	19850814	DE 1984-3403204	19840131
	EP 150435	A2	19850807	EP 1984-115708	19841218
	EP 150435	A3	19850821		
	EP 150435	B1	19880302		
	R: BE, DE, FR, GB, IT, NL				
	US 4581174	A	19860408	DE 1984-3403204	19840131
				US 1985-695196	19850125
				DE 1984-3403204	19840131
	CA 1234825	A1	19880405	CA 1985-473192	19850130
				DE 1984-3403204	19840131

AB In the continuous prepn. of **isocyanates** by phosgenation of amines in org. solvents under pressure at high temps. with partial recirculation of the reaction mixt., salts and byproduct formation are prevented by keeping the HCl content of the mixt. before amine addn. at <0.5% and the mol ratio of COCl<sub>2</sub> to NH<sub>2</sub> groups at 12-200:1. Thus, a methylenedianiline-polymethylenepolyphenylenepolyamine mixt. was phosgenated in PhCl at 130.degree./14.5 bar using a 30% amine soln. added at 500 kg/h with COCl<sub>2</sub> addn. at 150 kg/h. The HCl content of the mixt. before amine addn. was 0.4%. The reaction mixt. contained PhCl 41.4, **isocyanates** 19.5, COCl<sub>2</sub> 38.6, and HCl 0.4%. The yield of **isocyanates** was 100%.

L21 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2002 ACS

TI Two-step continuous manufacture of aromatic **isocyanates**

AN 1985:25208 CAPLUS

DN 102:25208

TI Two-step continuous manufacture of aromatic **isocyanates**

PA Mitsui Toatsu Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59141552	A2	19840814	JP 1983-13758	19830201

AB **Isocyanates** are prep'd. by dispersing amines in inert org. solvents, treating the amines and amine-HCl salts with phosgene at 60-100.degree. and 3-10 kg/cm<sup>2</sup> (gage) in the 1st step, transferring the reaction mixt. to a 2nd reactor at 120-170.degree. and 3-10 kg/cm<sup>2</sup> (gage) to complete the reaction of the amine-HCl salts and the decomprn. of carbamoyl chlorides, and recycling some of the waste gas to the 1st reactor. Thus, phosgene contg. 5% HCl 42.2, o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub> contg. 25% tolylenediamine [25376-45-8] 44, and o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub> 29.7 kg/h were fed to a reactor at 90.degree., allowed to react at retention liq. amt.

.apprx.49.5

kg and retention time 0.6 h, overflowed to a heater at 150.degree., allowed to react in the 2nd reactor at retention liq. amt. .apprx.81 kg

and retention time 1 h, discharged at 75 kg/h, and distd. to give a 19.6% TDI [26471-62-5].

L21 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Continuous preparation of organic **isocyanates**  
 AN 1983:90072 CAPLUS  
 DN 98:90072  
 TI Continuous preparation of organic **isocyanates**  
 IN Yamamoto, Ryuichi; Takagi, Akinobu; Kataita, Masafumi; Obata, Kenji; Mori,

Shigeki

PA Mitsui Toatsu Chemicals, Inc. , Japan

SO Fr. Demande, 36 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2503146	A1	19821008	FR 1982-6087	19820407
	FR 2503146	B1	19851227	JP 1981-51216	19810407
				JP 1981-183734	19811118
	JP 57165358	A2	19821012	JP 1981-51216	19810407
	JP 01024783	B4	19890515	JP 1981-183734	19811118
	JP 59122451	A2	19840714	JP 1981-183734	19811118
	JP 61026987	B4	19860623	IN 1982-CA336	19820325
	IN 156928	A	19851207	JP 1981-51216	19810407
	US 4422976	A	19831227	US 1982-364894	19820402
				JP 1981-51216	19810407
				JP 1981-183734	19811118
	DE 3212510	A1	19821111	DE 1982-3212510	19820403
	DE 3212510	C2	19870723	JP 1981-51216	19810407
	DE 3212510	C3	19900308	JP 1981-183734	19811118
				BR 1982-1971	19820406
	BR 8201971	A	19830308	JP 1981-51216	19810407
				JP 1981-183734	19811118
	GB 2097789	A	19821110	GB 1982-10299	19820407
	GB 2097789	B2	19850327	JP 1981-51216	19810407
				JP 1981-183734	19811118

AB In the title process, dispersed amines are condensed with COCl<sub>2</sub> [75-44-5] at 60-100.degree./.1toreq.9.8 bar for times sufficient to convert all amine hydrochlorides to carbamoyl chlorides and decomp. the latter. Thus, COCl<sub>2</sub> 24.3, a 17% o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub> soln. of m-toluenediamine [95-80-7] 44, and a recycle stream (5% carbamyl chloride, 5% TDI [26471-62-5], and excess COCl<sub>2</sub> in o-C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub>) 8200 Kg/h were mixed in a reactor with residence time 1.4 h at 80.degree./4.9 bar and fed to a 2nd reactor (residence time 1.5 h) at 150.degree./4.9 bar with 6 kg COCl<sub>2</sub>/h to give a soln. contg. 10.5% TDI and 0.5% nonvolatile residue, compared with 9.8 and 1.1, resp., when the 1st reactor was at 140.degree./0.8 bar.

L21 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2002 ACS

TI Organic **isocyanates**

AN 1982:424350 CAPLUS

DN 97:24350  
 TI Organic **isocyanates**  
 PA Mitsui Toatsu Chemicals, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57048954	A2	19820320	JP 1980-124708	19800910
AB	During the continuous manuf. of org. <b>isocyanates</b> , org. primary amines are fed to a circulating line contg. solns. of COCl <sub>2</sub> and <b>isocyanate</b> immediately ahead of a static or propeller line mixer and passed through the line mixer in <1 s. Thus, 46 kg/h 15% soln. of tolylenediamine [25376-45-8] in o-C <sub>12</sub> C <sub>6</sub> H <sub>4</sub> and 8200 kg/h soln. of 15% TDI [26471-62-5] and excess COCl <sub>2</sub> were passed through a static line mixer in .apprx.0.2 s and transferred to a storage tank at 140.degree. to discharge				
	HCl and recover the solvent and COCl <sub>2</sub> . A part of the reaction liq. was recovered as a product continuously and the major part was returned to the				
	mixer reactor, and the rest was mixed with 11 kg/h solvent and 22.3 kg/h COCl <sub>2</sub> (100% excess). The product was heated 30 min at 160.degree. and distd. to give a compn. of 16.1% TDI and 1.05% nonvolatile residues.				

L21 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2002 ACS  
 TI Organic **isocyanates** by phosgenation  
 AN 1979:524379 CAPLUS  
 DN 91:124379  
 TI Organic **isocyanates** by phosgenation  
 IN Yamamoto, Ryuichi; Yamamoto, Kosuke; Nagata, Teruyuki; Obata, Kenji  
 PA Mitsui Toatsu Chemicals, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54070220	A2	19790605	JP 1977-134692	19771111
	JP 57015827	B4	19820401		
	US 4193932	A	19800318	US 1978-955266	19781027
				JP 1977-134692	19771111
	DE 2847243	A1	19790517	DE 1978-2847243	19781031
	DE 2847243	C2	19830120		
				JP 1977-134692	19771111
	RO 77280	P	19810817	RO 1978-95634	19781110
				JP 1977-134692	19771111
	HU 21667	O	19820128	HU 1978-MI641	19781110
	HU 179251	B	19820928		
				JP 1977-134692	19771111

PATENT FAMILY INFORMATION:

FAN 1979:440090

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2847243	A1	19790517	DE 1978-2847243	19781031
	DE 2847243	C2	19830120		
				JP 1977-134692	19771111

JP 54070220 A2 19790605 JP 1977-134692 19771111  
 JP 57015827 B4 19820401

AB After phosgenation of diaminodiphenylmethane or tolylenediamine in an inert solvent, the mixt. is degassed with gaseous HCl instead of N to prevent discoloration and reduce hydrolyzable chlorides. Thus, PhNH<sub>2</sub>-H<sub>2</sub>CO-HCl condensate contg. 55% diaminodiphenylmethane was dild. with o-Cl<sub>2</sub>C<sub>6</sub>H<sub>4</sub> to 7% concn., treated with COCl<sub>2</sub> [75-44-5] at 20-150.degree., and degassed with 300 mL/min HCl at 170.degree. for 2 h. Evapn. gave a polyisocyanate compn. contg. 31.0% NCO and 0.161% hydrolyzable chlorides, vs. 30.8 and 0.180%, resp., with N instead of HCl.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.06	140.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.05	-8.05

SESSION WILL BE HELD FOR 60 MINUTES  
 STN INTERNATIONAL SESSION SUSPENDED AT 11:04:23 ON 12 JUN 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:  
 \* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
 SESSION RESUMED IN FILE 'CAPLUS' AT 11:29:48 ON 12 JUN 2002  
 FILE 'CAPLUS' ENTERED AT 11:29:48 ON 12 JUN 2002  
 COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.06	140.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.05	-8.05

=> bromine content  
 38617 BROMINE  
 132 BROMINES  
 38698 BROMINE  
 (BROMINE OR BROMINES)  
 1192366 CONTENT  
 281138 CONTENTS  
 1360324 CONTENT  
 (CONTENT OR CONTENTS)  
 L22 345 BROMINE CONTENT  
 (BROMINE (W) CONTENT)

=> d his

(FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002)

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002  
E PHOSGENE/CN

L1 1 E3  
E BROMINE/CN  
L2 1 E3  
L3 1 L2  
E IODINE/CN  
L4 1 E3

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

L5 5229 L1  
L6 21643 L2  
L7 36942 L4  
L8 53283 L6 OR L7  
L9 72 L5 AND L8  
L10 60170 ISOCYANATE  
L11 8 L9 AND L10  
L12 102 L8 AND L10  
L13 15 L8(L)L10  
L14 358596 COLOR  
L15 0 L13 AND L14  
SAVE TEMP ALL LTISOCYANATE/L

FILE 'REGISTRY' ENTERED AT 10:45:52 ON 12 JUN 2002

E DIPHENYLMETHANEDIAMINE/CN  
E DIAMINOPHENYLMETHANE/CN

L16 1 E3  
L17 STRUCTURE uploaded  
L18 11 SEARCH L17 EXACT FULL

FILE 'CAPLUS' ENTERED AT 10:51:59 ON 12 JUN 2002

L19 3948 L18  
L20 45 L19 AND L5  
L21 31 L10 AND L20  
SAVE TEMP L21 ISOCYANHITS/A  
L22 345 BROMINE CONTENT

=> l22 and 15

L23 0 L22 AND L5

=> halogen

92068 HALOGEN  
17465 HALOGENS  
L24 101538 HALOGEN  
(HALOGEN OR HALOGENS)

=> ?isocyanate

L25 91755 ?ISOCYANATE

=> l24 and l25

L26 1276 L24 AND L25

=> l14 and l26

L27 45 L14 AND L26

=> d 127 35-45 ti

L27 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Heat-developable photosensitive material

L27 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Methine dyes and their use

L27 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Photopolymerizable mixture

L27 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Chemically joined phase separated thermoplastic graft copolymers

L27 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI N-(o-Hydroxyphenyl)-N'-phenylureas for combating harmful microorganisms  
outside the textile industry

L27 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Halogenated polyester compositions

L27 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Diorgano phosphorylated polyols and flame-retardant polyurethane foams  
therefrom

L27 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Improving the **color** stability of expanded polyurethans

L27 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Organic isocyanates. III. Reaction of aromatic isocyanates with  
**halogens**

L27 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Remarks on the communication of R. Lesser, E. Kranepuhl and G. Gad on the  
constitution of naphthalene and its derivatives

L27 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2002 ACS  
TI Nitrones and nitrenes

=> 125(1)114

L28 1573 L25(L)L14

=> 128(10124

MISSING OPERATOR 'L28(L)124'

The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> 128(1)124

L29 17 L28(L)L24

=> d 129 1-17 ti

L29 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Production of black thermal copying sheet

L29 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Monohydric alcohol derived urethanes and their use in cosmetic

formulations

L29 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Biodegradable ink compositions contg. no halogen-organic solvents

L29 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI colored positive-working photosensitive recording material

L29 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Thermal-transfer printing

L29 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Microencapsulated toners containing photocurable resins fixing agent

L29 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Electrochromic or photochromic resin composition

L29 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Cyan dye-releasing compounds for use in the production of diffusion-transfer color images

L29 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Rigid polyurethane foam molding

L29 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Polyurethane foam moldings

L29 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Heat-developable photosensitive material

L29 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Photopolymerizable mixture

L29 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI N-(o-Hydroxyphenyl)-N'-phenylureas for combating harmful microorganisms outside the textile industry

L29 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Halogenated polyester compositions

L29 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Improving the color stability of expanded polyurethans

L29 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Remarks on the communication of R. Lesser, E. Kranepuhl and G. Gad on the constitution of naphthalene and its derivatives

L29 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Nitrones and nitrenes

=> d 129 15 ti fbib abs

L29 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS  
TI Improving the color stability of expanded polyurethans  
AN 1967:46926 CAPLUS  
DN 66:46926  
TI Improving the color stability of expanded polyurethans  
PA Imperial Chemical Industries Ltd.

SO Belg., 20 pp.  
CODEN: BEXXAL

DT Patent  
LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 671112		19660419	GB	19641020

AB Expanded polyurethans prep'd. from an org. **polyisocyanate**, a polyester with OH groups, a foaming agent, an org. **halogen** compd., a tertiary ester of H<sub>3</sub>PO<sub>4</sub>, and a phenolic antioxidant had improved

**color** stability. Thus, a polyurethan foam that became brown after formation was prep'd. from 100 parts poly(diethylene adipate) modified by pentaerythritol, 62 parts tolylene **diisocyanate** (65:35 mixt. of 2,4- and 2,6-isomers), 5 parts water, 1 part of the condensation product of ethylene oxide with octylphenol, 0.4 part of the ethylene oxide-ricinoleic acid condensate, 0.1 part Na polypropylene glycol sulfate, 0.65 part N,N-dimethyl cyclohexylamine, and 10 parts tris(.beta.-chloroethyl) phosphate. When 1 part triphenyl phosphite was added to the mixt., the foamed polyurethan produced showed only a slight **color** degradation. The addn. of 1 part (PhO)<sub>3</sub>P and 0.5 part 2-(2-methyl-cyclohexyl)-4,6-dimethylphenol improved the **color** stability slightly more. Similar improvements in **color** stability were obtained by adding diisodecylpentaerythrityl diphosphite and tert-butylcatechol, together or in appropriate combinations with the H<sub>3</sub>PO<sub>4</sub> esters and phenolic compds. mentioned above.

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

70.76

161.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

CA SUBSCRIBER PRICE

-8.67

-8.67

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 11:35:48 ON 12 JUN 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 11:52:58 ON 12 JUN 2002  
FILE 'CAPLUS' ENTERED AT 11:52:58 ON 12 JUN 2002  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

70.76

161.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.67	-8.67

=> d his

(FILE 'HOME' ENTERED AT 09:05:07 ON 12 JUN 2002)

FILE 'REGISTRY' ENTERED AT 09:05:21 ON 12 JUN 2002  
 E PHOSGENE/CN

L1	1 E3 E BROMINE/CN
L2	1 E3
L3	1 L2 E IODINE/CN
L4	1 E3

FILE 'CAPLUS' ENTERED AT 09:06:52 ON 12 JUN 2002

L5	5229 L1
L6	21643 L2
L7	36942 L4
L8	53283 L6 OR L7
L9	72 L5 AND L8
L10	60170 ISOCYANATE
L11	8 L9 AND L10
L12	102 L8 AND L10
L13	15 L8(L) L10
L14	358596 COLOR
L15	0 L13 AND L14 SAVE TEMP ALL LTISOCYANATE/L

FILE 'REGISTRY' ENTERED AT 10:45:52 ON 12 JUN 2002

  E DIPHENYLMETHANEDIAMINE/CN  
 E DIAMINOPHENYLMETHANE/CN

L16	1 E3
L17	STRUCTURE UPLOADED
L18	11 SEARCH L17 EXACT FULL

FILE 'CAPLUS' ENTERED AT 10:51:59 ON 12 JUN 2002

L19	3948 L18
L20	45 L19 AND L5
L21	31 L10 AND L20 SAVE TEMP L21 ISOCYANHITS/A
L22	345 BROMINE CONTENT
L23	0 L22 AND L5
L24	101538 HALOGEN
L25	91755 ?ISOCYANATE
L26	1276 L24 AND L25
L27	45 L14 AND L26
L28	1573 L25(L) L14
L29	17 L28(L) L24

=> technical grade  
 8 TECHICAL  
 88695 GRADE  
 20083 GRADES  
 104445 GRADE  
 (GRADE OR GRADES)

L30 0 TECHICAL GRADE  
(TECHICAL (W) GRADE)

=> technical grade  
27520 TECHNICAL  
4 TECHNICALS  
27524 TECHNICAL  
(TECHNICAL OR TECHNICALS)  
74763 TECH  
95414 TECHNICAL  
(TECHNICAL OR TECH)  
88695 GRADE  
20083 GRADES  
104445 GRADE  
(GRADE OR GRADES)  
L31 4387 TECHNICAL GRADE  
(TECHNICAL (W) GRADE)

=> 15 and 131

L32 1 L5 AND L31

=> d 132 ti

L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
TI Basic impurities in technical thionyl chloride

=> d 132 ti fbib abs

L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
TI Basic impurities in technical thionyl chloride  
AN 1992:197045 CAPLUS  
DN 116:197045  
TI Basic impurities in technical thionyl chloride  
AU Smirnov, V. I.; Milova, N. M.; Zhalyaleva, E. S.; Leont'eva, T. A.  
CS USSR  
SO Khim. Prom-st. (Moscow) (1992), (1), 15-16  
CODEN: KPRMAW; ISSN: 0023-110X  
DT Journal  
LA Russian  
AB Gas chromatog. and spectral anal. were used to det. the basic impurities in **tech. grade**  $SOCl_2$  obtained by the reaction of  $COCl_2$  with  $SO_2$  on activated C at 150-250.degree.. The **tech. grade**  $SOCl_2$  is treated with S for the conversion of  $SCl_2$  into  $S_2Cl_2$  and removal of the latter by fractionation at 137.degree., followed by blowing with dry  $N_2$  and sepn. of  $SOCl_2$  from the reaction mixt. by distn. The final product contained  $SOCl_2$  97.9,  $SO_2$  0.8,  $COCl_2$  0.7,  $SO_2Cl_2$  0.3,  $HCl$  0.1,  $CCl_4$  0.05,  $S_2Cl_2$  0.05,  $SCl_2$  0.05, and  $Fe$  0.0003%.

=> technical  
27520 TECHNICAL  
4 TECHNICALS  
27524 TECHNICAL  
(TECHNICAL OR TECHNICALS)  
74763 TECH  
95414 TECHNICAL  
(TECHNICAL OR TECH)  
L33

=> 15(1)133  
L34 0 L5(L) L33

=> 15 and 133  
L35 8 L5 AND L33

=> bromine  
38617 BROMINE  
132 BROMINES  
L36 38698 BROMINE  
(BROMINE OR BROMINES)

=> 135 and 136  
L37 0 L35 AND L36

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	84.68	175.53
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.29	-9.29

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 11:55:39 ON 12 JUN 2002